Using

Reports

Objectives

- ► **Plan a report**
- MOUS ► **Create a report**
- MOUS ► **Group records**
- MOUS ► **Change the sort order**
- MOUS ► **Add a calculation**
- MOUS ► **Align controls**
- MOUS ► **Format controls**
- ► **Create mailing labels**

A **report** is an Access object used to create professional printouts. The record source for an Access report is either a table or a query object. A report is created using commands and tools similar to those used to create a form. Although you can print a datasheet or form, reports are the primary object used to create professional printouts because reports provide many more printing options. For example, a report may include formatting embellishments such as multiple fonts and colors, extra graphical elements such as clip art and lines, and multiple headers and footers. Reports are also very powerful analysis tools. A report can calculate subtotals, averages, counts, or other statistics for groups of records. You cannot enter or edit data through a report. Kelsey Lang, a marketing manager at MediaLoft, wants to produce some reports to distribute to MediaLoft employees.

Planning a Report

Hard copy reports are often the primary tool used to communicate database information at meetings, with clients or customers, or with top executives. Time spent planning your report not only increases your productivity but also ensures that the report meets its intended objectives. Creating a report is similar to creating a form, and you work with bound, unbound, and calculated controls in Report Design View just as you do in Form Design View. Reports, however, have more sections than forms. The report **section** determines how often and where controls placed within that section print in the final report. See Table D-1 for more information on report sections. Kelsey has been asked to provide several reports on a regular basis to the MediaLoft executives. Her first report summarizes inventory quantities within each music category.

Details

Kelsey uses the following guidelines to plan her report:

► **Identify a meaningful title for the report**

The title should clearly identify the purpose of the report and be meaningful to those who will be reading the report. The title is created with a label control placed in the Report Header section.

► **Determine the information (the fields and records) that the report will show**

You can base a report on a table, but usually you create a query to gather the specific fields from the one or more tables upon which the report is based. If you base the report on a query, you are also able to set criteria within the query to limit the number of records displayed by the report.

► **Determine how the fields should be organized on the report**

Most reports display fields in a horizontal layout across the page, but you can arrange them any way you want. Just as in forms, bound text box controls are used on a report to display the data stored in the underlying fields. These text boxes are generally placed in the report **Detail** section. The Detail section of a report is always visible in Report Design View.

► **Determine how the records should be sorted and/or grouped within the report**

In an Access report, **grouping** means to sort records in a particular order *plus* provide a section before the group of records called the Group Header section and a section after the group of records called the Group Footer section. The **Group Header** section contains controls that introduce the upcoming group of records. The **Group Footer** section holds controls that calculate statistics such as subtotals for the preceding group of records.

The ability to group records is extremely powerful. For example, you might group the records of an address report by the State field. Since State is the grouping field, you would be able to add the State Header and State Footer sections to the report. In the State Header section you might add a text box bound to the State field that displays the name of the state before listing the Detail records for that state. In the State Footer section you might add a text box that contains an expression to count the number of records within each state. You might want to further sort the records by the City field, so that the Detail records printed for each state would be listed in ascending order based on the value of the City field.

Group Header and Footer sections are opened by specifying a Yes value to these field properties in the Sorting and Grouping dialog box, opened by clicking the Sorting and Grouping button on the Report Design toolbar.

► **Identify any other descriptive information that should be placed at the beginning or end of the report, or at the top or bottom of each page**

You will use the **Report Header**, **Report Footer**, **Page Header**, and **Page Footer** sections to add information that you wish to print on every page, or at the beginning or end of the report. For example, you might add a text box that contains an expression to display the current date in the Page Header section, or you might add a text box that contains an expression to display the current page number in the Page Footer section. The Report Header and Report Footer sections of a report can be opened using the Report Header/Footer option on the View menu in Report Design View.

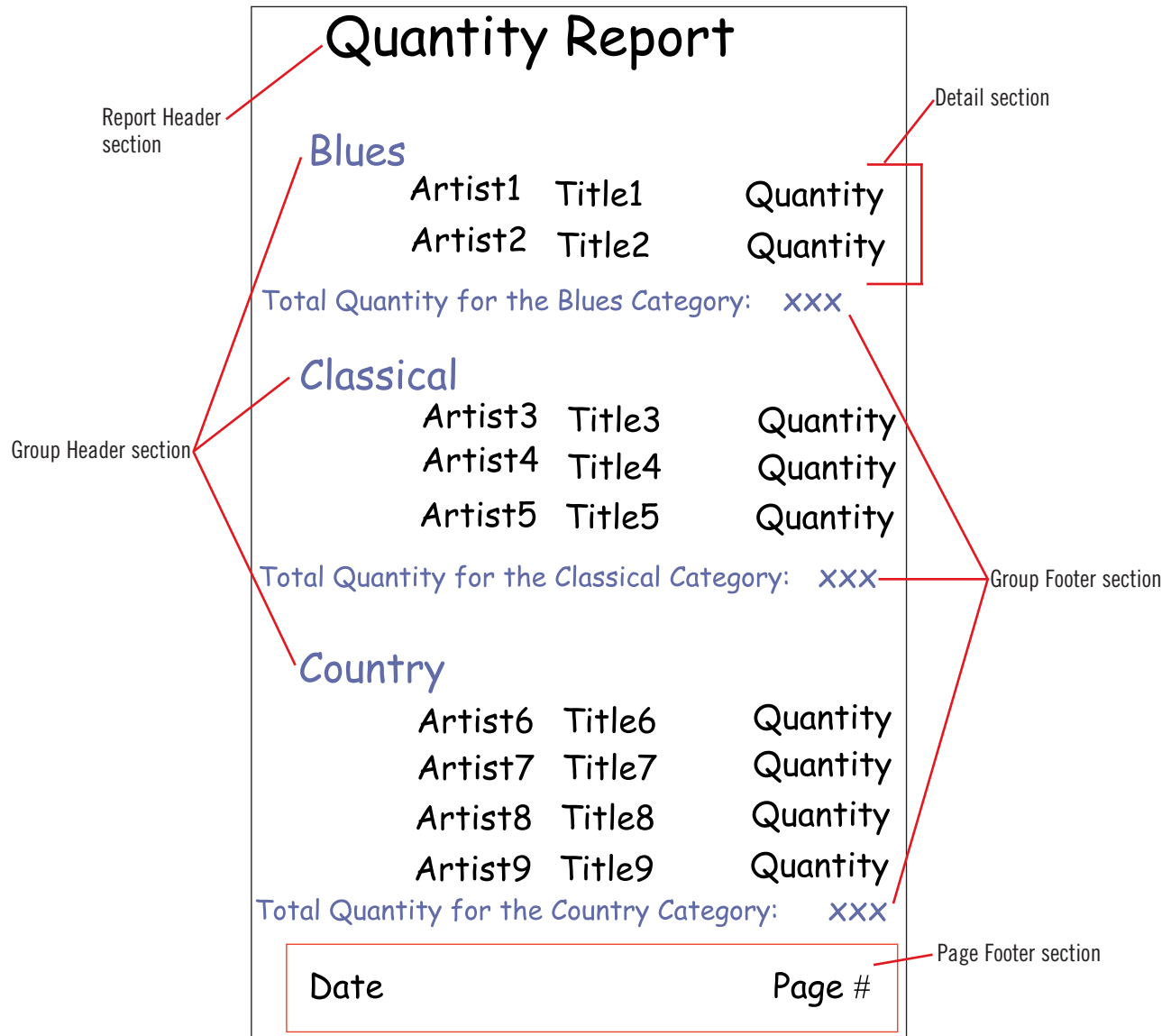Kelsey sketched her first report as shown in Figure D-1.

Quantity Report

Report Header
section

Detail section

Blues

Artist1   Title1   Quantity
Artist2   Title2   Quantity

Group Header section

Total Quantity for the Blues Category: xxx

Classical

Artist3   Title3   Quantity
Artist4   Title4   Quantity
Artist5   Title5   Quantity

Total Quantity for the Classical Category: xxx

Group Footer section

Country

Artist6   Title6   Quantity
Artist7   Title7   Quantity
Artist8   Title8   Quantity
Artist9   Title9   Quantity

Total Quantity for the Country Category: xxx

Page Footer section

Date   Page #

Access 2002

TABLE D-1: Report sections

section	where does this section print?	which controls are most commonly placed in this section?
Report Header	At the top of the first page of the report	Label controls containing the report title; can also include clip art, a logo image, or a line separating the title from the rest of the report
Page Header	At the top of every page (but below the Report Header on page one)	Text box controls containing a page number or date expression
Group Header	Before every group of records	Text box control for the field by which the records are grouped
Detail	Once for every record	Text box controls for the rest of the fields in the recordset (the table or query upon which the report is built)
Group Footer	After every group of records	Text box controls containing calculated expressions, such as subtotals or counts, for the records in that group
Page Footer	At the bottom of every page	Text box controls containing a page number or date expression
Report Footer	At the end of the entire report	Text box controls containing expressions such as grand totals or counts that calculate a value for all of the records in the report

Creating a Report

You can create reports in Access in Report Design View, or you can use the Report Wizard to help you get started. The **Report Wizard** asks questions that guide you through the initial development of the report, similar to the Form Wizard. Your responses to the Report Wizard questions specify the fields you want to view in the report, the style and layout of the report, and how you want the records to be sorted, grouped, and analyzed. Another way to quickly create a report is by selecting a table or query, clicking the New Object list arrow on the Database toolbar, and then clicking AutoReport. AutoReport, however, does not give you a chance to review the options provided by the Report Wizard. ✎ Kelsey uses the Report Wizard to create the Quantities Report she planned on paper.

Steps 1234

1. Start Access, click the **More files link** in the Open a file section of the New File task pane, then open the **MediaLoft-D** database from the drive and folder where your Project Files are located
   This database contains a Music Inventory table and a query object from which you will base your reports.

2. Click **Reports** on the Objects bar in the MediaLoft-D database window, then double-click **Create report by using wizard**
   The Report Wizard dialog box opens. The Selection Quantities query has the fields you need for this report.

3. Click the **Tables/Queries list arrow**, click **Query: Selection Quantities**, click **Category** in the Available Fields list, then click the **Select Single Field button** `>`
   The Category field moves from the Available Fields list to the Selected Fields list.

Trouble?

If you did not select the fields in the correct order, click the Remove Single Field button `<` to move fields from the Selected Fields list back to the Available Fields list.

4. Double-click **Title**, double-click **Artist**, then double-click **Quantity**
   The four fields are selected and the first dialog box of the Report Wizard should look like Figure D-2. The Report Wizard also asks grouping and sorting questions that determine the order and amount of detail provided on the report.

5. Click **Next**, click **Next** to move past the grouping levels question, click the **first sort order list arrow** in the Report Wizard dialog box, then click **Category**
   You can use the Report Wizard to specify up to four sort fields in either an ascending or descending sort order for each field.

Trouble?

Click Back to review previous dialog boxes within a wizard.

6. Click **Next**, click **Next** to accept the **Tabular** layout and **Portrait** orientation, click **Corporate** for the style, click **Next**, type **Quantities Report** for the report title, verify that the **Preview the report option button** is selected, then click **Finish**
   The Quantities Report opens in Print Preview, as shown in Figure D-3. It is very similar to the sketch created earlier. Notice that the records are sorted by the Category field.
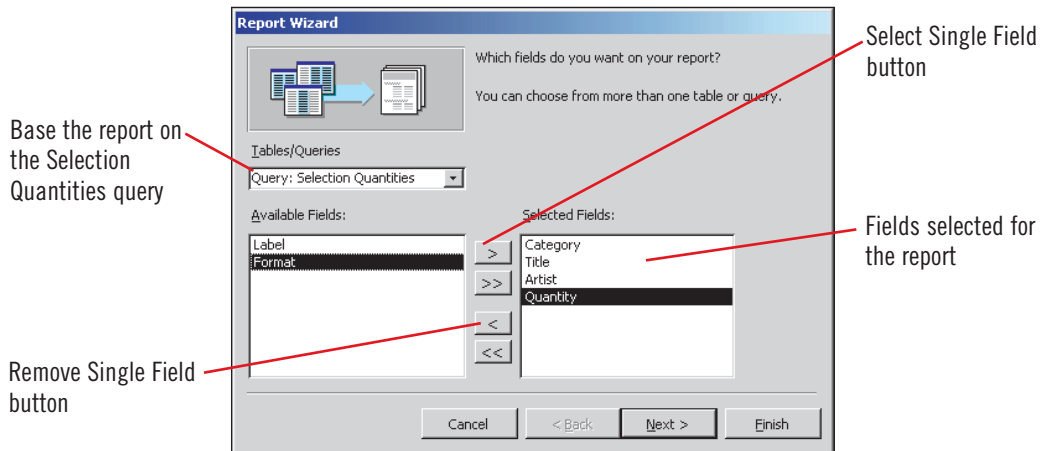
FIGURE D-2: Report Wizard dialog box

Base the report on the Selection Quantities query

Remove Single Field button

Select Single Field button

Fields selected for the report

FIGURE D-3: Quantities Report in Print Preview

Labels

Text boxes

Report Header

Page Header

Detail records

CLUES TO USE

Why reports should be based on queries

Although you can use the first dialog box of the Report Wizard to select fields from different tables without first creating a query to collect those fields into one object, it is not recommended. If you later decide that you want to add more fields to the report or limit the number of records in the table, you will find it very easy to add fields or criteria to an underlying query object to meet these new needs. To accomplish this same task without using an intermediary query object requires that you change the Record Source property of the report itself, which most users find more difficult than working with a query.

Grouping Records

Grouping refers to sorting records on a report *in addition to* providing an area above and below the group of records in which additional controls can be placed. These two special sections of the report are called the Group Header and Group Footer. You can create groups on a report through the Report Wizard, or you can change an existing report's grouping and sorting fields in Report Design View. Just as with forms, you make all structural changes to a report in the object's Design View. ✏️ Kelsey wants to group the Quantities Report by the Category field instead of simply sorting it by Category. In addition, she wants to add controls to the Group Header and Group Footer to clarify and summarize information within the report.

Steps 1234

1. Click the **Design View button** 📐 on the Print Preview toolbar to switch to Report Design View
   Report Design View shows you the sections of the report as well as the controls within each section. It is difficult to visually distinguish labels and text boxes in Report Design View, but you can always open the property sheet and view its title bar to determine the type of control you're working with. Report Design View is where you change grouping and sorting fields.

2. Click the **Sorting and Grouping button** 📑 on the Report Design toolbar, click the **Group Header text box**, click the **Group Header list arrow**, click **Yes**, click the **Group Footer text box**, click the **Group Footer list arrow**, then click **Yes**
   Specifying Yes for the Group Header and Group Footer properties opens those sections of the report in Report Design View. The dialog box is shown in Figure D-4.

Trouble?

Be careful to drag the Category text box in the Detail section rather than the Category label in the Page Header section.

3. Click 📑 to close the Sorting and Grouping dialog box, click the **Category text box** in the Detail section, then drag the **text box** with the ✋ pointer straight up into the Category Header section
   By placing the Category text box in the Category Header, it will print once for each new category value rather than once for each record. You can add a calculated control to subtotal each category of records by placing a text box in the Category Footer section, and entering an expression into the text box.

4. If the Toolbox toolbar is not visible, click the **Toolbox button** 🔨 on the Report Design toolbar, click the **Text Box button** ⬚ on the Toolbox toolbar, then click in the **Category Footer section** directly below the Quantity text box
   Your screen should look like Figure D-5. You can modify the label and text box controls in the Category Footer section to describe and define the Quantity field subtotal.

Trouble?

If you double-click the label itself (versus Text13), you will open the control's property sheet.

5. Click the **Text13: label** in the Category Footer section to select it, double-click **Text13**, type **Subtotal**, then press **[Enter]**

6. Click the **unbound text box control** in the Category Footer section to select it, click **Unbound** within the text box control to edit it, type **=sum([Quantity])**, then press **Enter**
   The expression that calculates the sum of the Quantity field is now in the text box control. Calculated expressions start with an equal sign. When entering an expression, the field name is not case sensitive, but it must be surrounded by square brackets and match the field name as defined in Table Design View.

7. Click the **Print Preview button** 🔍 on the Report Design toolbar
   Since the Category text box was moved to the Category Header section, it prints only once per group of records as shown in Figure D-6. Each group of records is followed by a Group Footer that includes the Subtotal label as well as a calculated field that subtotals the Quantity field for that group of records.

8. Click the **Close button** Close on the Print Preview toolbar, click 🔨 to toggle off the Toolbox, click the **Save button** 💾, then close the Quantities Report

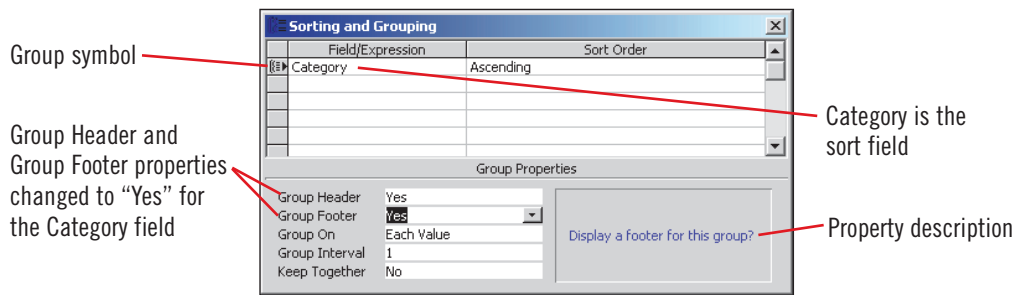**FIGURE D-4:** Sorting and Grouping dialog box

Group symbol

Group Header and
Group Footer properties
changed to "Yes" for
the Category field

Category is the
sort field

Property description

Sorting and Grouping

Field/Expression	Sort Order
Category	Ascending

Group Properties

Group Header	Yes
Group Footer	Yes
Group On	Each Value
Group Interval	1
Keep Together	No

Display a footer for this group?

FIGURE D-5: Quantities Report in Report Design View

Field List
button

Labels

Category
Header

Category text
box

Category
Footer

Text boxes

Toolbox button

Properties button

Sorting and
Grouping button

Text box button

New label

New text box

Quantities Report

Category   Title   Artist   Quantity

Title   Artist   Quantity

Text13:   Unbound

=Now()   ="Page " & [Page] & " of " & [Pages]
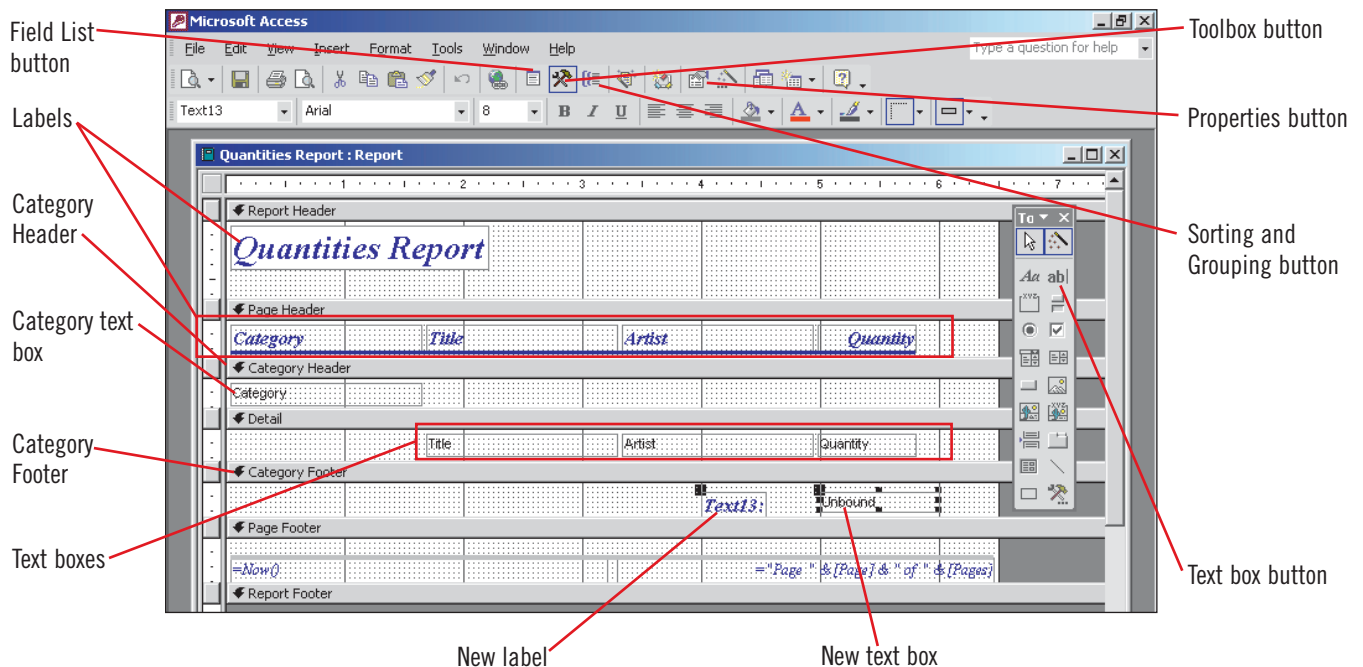
FIGURE D-6: The Quantities Report grouped by the Category field

Report Header

Group Header

Page Header

Detail

Group Footer

Quantities Report : Report

Quantities Report

Category	Title	Artist	Quantity
Blues			
	Life, Love & The Blues	James, Etta	5
	Turn the Heat Up	Copeland, Shemekia	5
	Deuces Wild	B.B. King	5
	Sing It!	Ball, Marcia	5
	Heavy Love	Buddy Guy	14
		Subtotal:	34
Classical			
	Favorite Overtures	Bernstein, Leonard	55
	Fantasia	Stokowski, Leopold	20
	Handel's Messiah	Bernstein, Leonard	15

Page: 1

Changing the Sort Order

The grouping field acts as a primary sort field. You can define additional sort fields too. When you sort records within a group, you order the Detail records according to a particular field. The Report Wizard prompts you for group and sort information at the time you create the report, but you can also group and sort an existing report by using the Sorting and Grouping dialog box in Report Design View. ✒ Kelsey wants to modify the Quantities Report so that the Detail records are sorted by the Artist field within the Category group.

Steps 1 2 3 4

1. Right-click the **Quantities Report**, then click **Design View**
   The Quantities Report opens in Design View.

2. Click the **Sorting and Grouping button** on the Report Design toolbar, click the **Field/Expression text box** in the second row, click the **Field/Expression list arrow**, then click **Artist** as shown in Figure D-7
   Both the Group Header and Group Footer Group property values are set to No, which indicates that the Artist field is providing a sort order only.

3. Click to toggle the Sorting and Grouping dialog box off, then click the **Print Preview button** on the Report Design toolbar
   Part of the report is shown in Print Preview, as shown in Figure D-8. You can use the buttons on the Print Preview toolbar to view more of the report.

4. Click the **One Page button** on the Print Preview toolbar to view one miniature page, click the **Two Pages button** to view two pages, click the **Multiple Pages button**, then drag to the right in the grid to show **1 × 4 Pages** as shown in Figure D-9
   The Print Preview window displays the four pages of the report. You can click the **Zoom pointers** and to change the zoom magnification.

5. Point to the **last subtotal** on the last page of the report with the pointer, click to read the number **92** in the last subtotal of the report, then click again to view all four pages of the report in the Preview window
   To zoom the preview to a specific percentage, click the **Fit button list arrow** `Fit` on the Print Preview toolbar, then click a percentage. The **Fit** option automatically adjusts the preview to display all pages in the report.

6. Click the **Close button** `Close` on the Print Preview toolbar, then click the **Save button** on the Report Design toolbar

CLUES TO USE

Adding a field to a report

To add a field from the underlying table or query object to the report, click the Field List button on the Report Design toolbar, then drag the field from the field list to the appropriate position on the report. This action creates both a label control that displays the field name and a bound text box control that displays the value of the field on the resulting report.

Group symbol

Artist field is selected
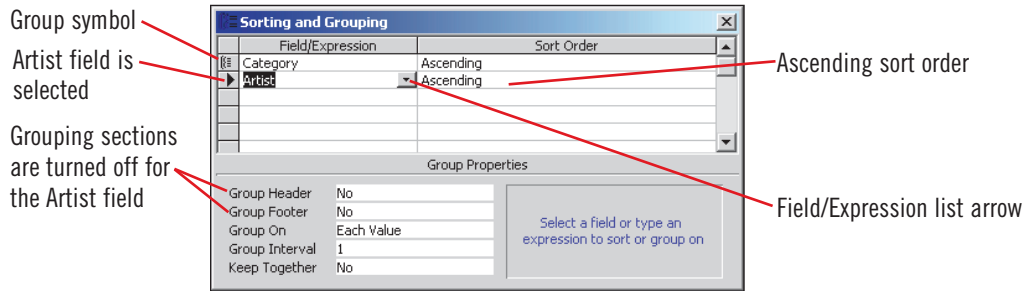
Grouping sections are turned off for the Artist field

Ascending sort order

Field/Expression list arrow

FIGURE D-8: The Quantities Report sorted by Artist

Detail records are now sorted in ascending order by Artist

FIGURE D-9: Print Preview

Fit button list arrow

Drag to 1 × 4 Pages

One Page button

Two Pages button

Multiple Pages button
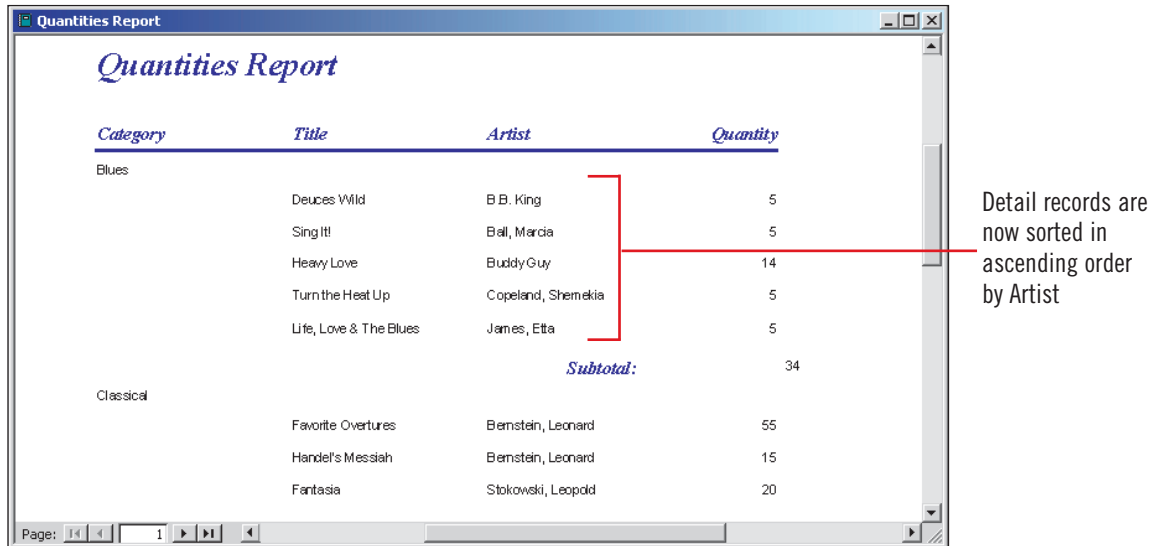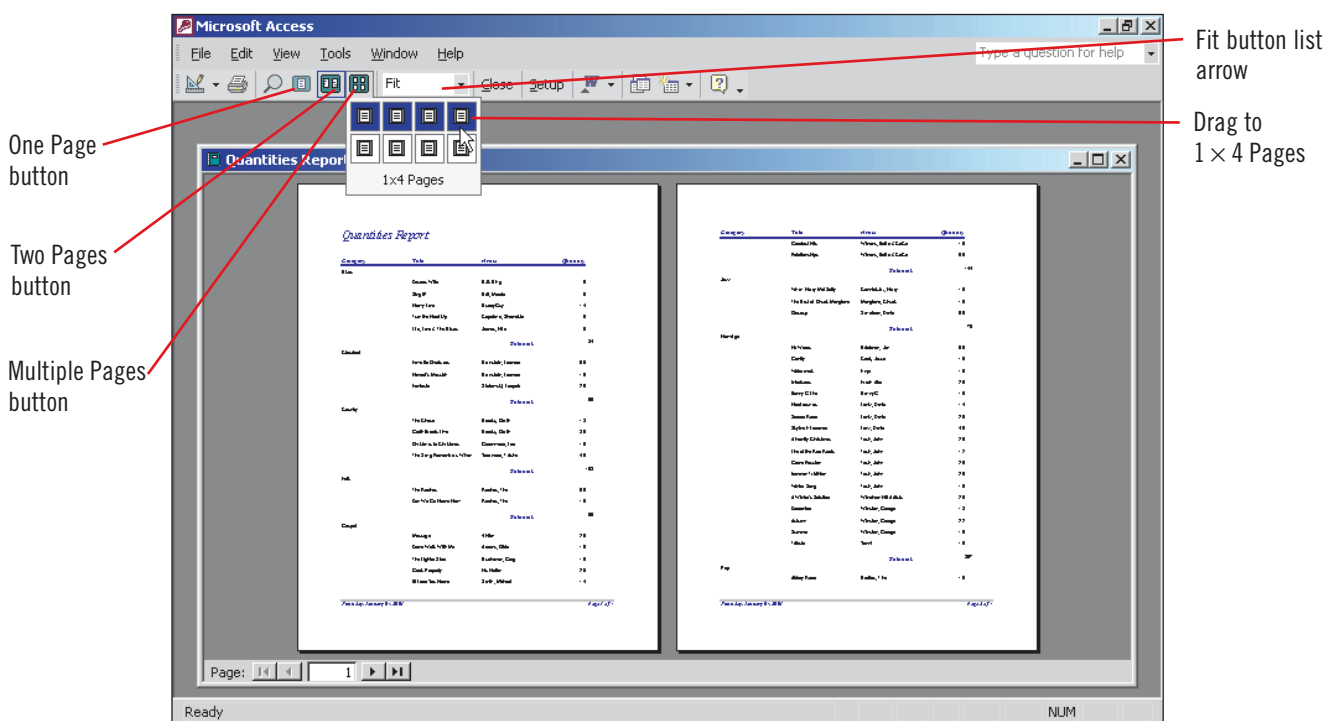
Adding a Calculation

In a report, you create a **calculation** by entering an expression into an unbound text box. When a report is previewed or printed, the expression is evaluated and the resulting calculation is placed on the report. An **expression** is a combination of fields, operators (such as +, −, / and *), and functions that result in a single value. Many times, expressions include functions such as SUM or COUNT. A **function** is a built-in formula provided by Access that helps you quickly create a calculation. See Table D-2 for examples of common expressions that use Access functions. Notice that every calculated expression starts with an equal sign, and when it uses a function, the arguments for the function are placed in parentheses. **Arguments** are the pieces of information that the function needs to create the final answer. Kelsey adds another calculation to the Quantities Report that counts the number of records within each music category.

Steps 1 2 3 4

1. Make sure the Quantities Report is in Report Design View, right-click the **=Sum([Quantity]) text box** in the Category Footer section, click **Copy** on the shortcut menu, right-click in a **blank area** in the left part of the Category Footer section, then click **Paste** on the shortcut menu as shown in Figure D-10
   Modifying a copy of the existing calculated expression control saves time and reduces errors.

2. Click the new **Subtotal label** in the Category Footer section to select it, double-click **Subtotal** to select the text, type **count**, then press **[Enter]**
   The label is only descriptive text. The text box to the right of the Count label will contain the expression that calculates the count. Right now, however, it still calculates a sum of the Quantity values instead of a count of Quantity values.

3. Click the new **=Sum([Quantity]) text box** in the Category Footer section to select it, double-click the **Sum** function within the expression to select it, type **count**, then press **[Enter]**
   The expression now counts the number of records in each group.

4. Click the **Save button** 💾 on the Report Design toolbar
   When you save a report object, you are saving the report definition, not the data displayed by the report. The data that the report displays was automatically saved as it was previously entered into the database. Once a report object is saved, it will always show the most up-to-date data when you preview or print the report.

5. Click the **Print Preview button** 🔍 on the Report Design toolbar, click the **Zoom list arrow** `100%`, click **100%,** then scroll the Preview window as shown in Figure D-11

TABLE D-2: Common Access expressions

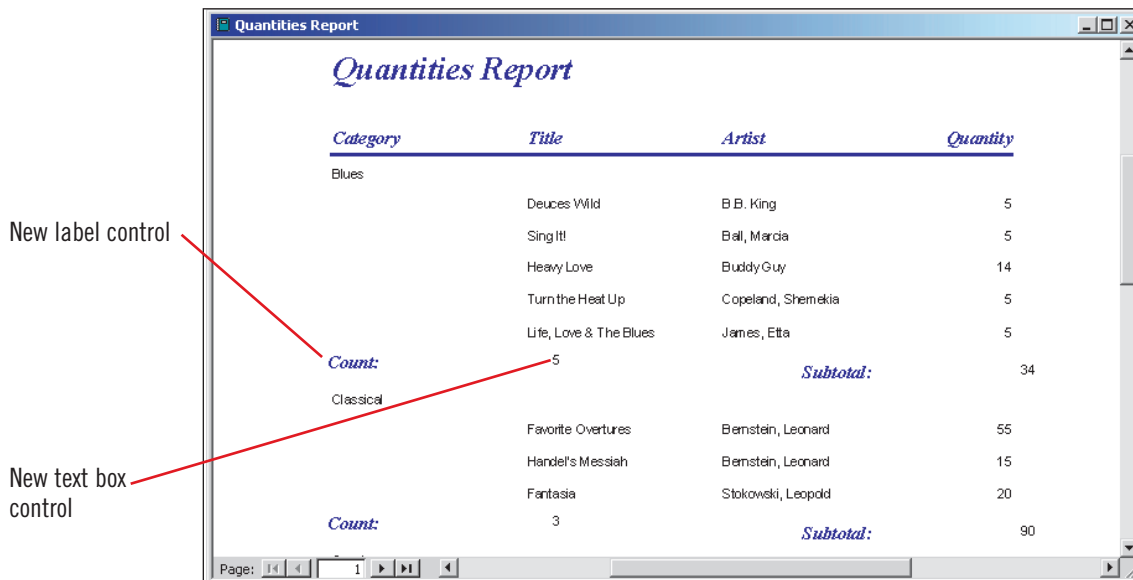| category	sample expression	description
Arithmetic	=[Price]*1.05	Multiplies the Price field by 1.05 (adds 5% to the Price field)
Arithmetic	=[Subtotal]+[Shipping]	Adds the value of the Subtotal field to the value of the Shipping field
Page Number	="Page "&[Page]	Displays the word Page, a space, and the current page number
Text	=[FirstName]& " "&[LastName]	Displays the value of the FirstName and LastName fields in one control separated by a space
Text	=Left([ProductNumber],2)	Uses the **Left** function to display the first two characters in the ProductNumber field
Aggregate	=Avg([Freight])	Uses the **Avg** function to display an average of the values in the Freight field
Date	=Date()	Uses the **Date** function to display the current date in the form of mm-dd-yy

FIGURE D-10: Copying and pasting a calculated control

Copy button

Paste button

New label control

New text box control
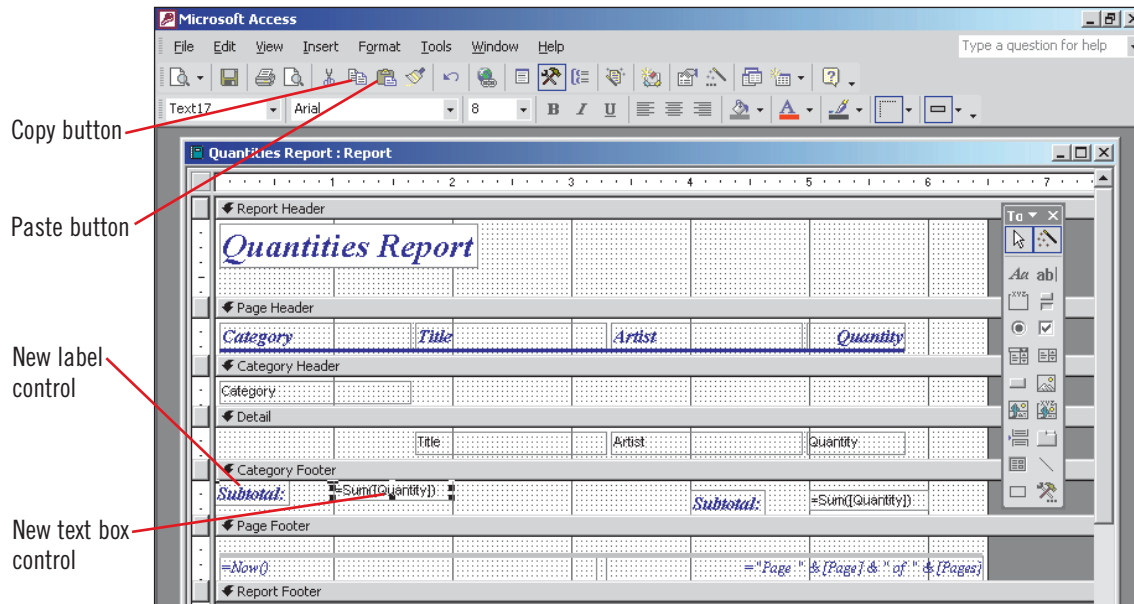
FIGURE D-11: Previewing the Count calculated control

New label control

New text box control

Using the Office Clipboard

The Office Clipboard lets you copy and paste multiple items within or between the Microsoft Office applications. To view the Clipboard task pane, click Edit on the menu bar, then click Clipboard. The Clipboard can collect up to 24 items, and you can paste any of these items at any time. Click the Options button within the Office Clipboard task pane to set Clipboard characteristics such as when it will automatically appear.

Aligning Controls

Once the information that you want to present has been added to the appropriate section of a report, you may also want to rearrange the data on the report. Aligning controls in columns and rows makes the information easier to read. There are several **alignment** commands. You can left-, right-, or center-align a control *within its own border* using the Alignment buttons on the Formatting (Form/Report) toolbar, or you can align the edges of controls *with respect to one another* using the Align command on the Format menu. Kelsey aligns several controls on the Quantities Report to improve the readability of the report, and give it a more professional look.

Steps

1. Click the **Design View button** on the Print Preview toolbar, then click in the **vertical ruler** to the left of the Count label in the Category Footer section
   All four controls in the Category Footer section are selected. Text boxes that display numeric fields are right-aligned by default. The label and text box that you added in the Category Footer section that display calculated expressions are left-aligned by default.

2. Click the **Align Right button** on the Formatting (Form/Report) toolbar
   Your screen should look like Figure D-12. Now the information displayed by these controls is right-aligned within the border of that control.

3. With the four controls still selected, click **Format** on the menu bar, point to **Align**, then click **Bottom**
   The bottom edges of the four controls are now aligned with respect to one another. You can also align the right or left edges of controls in different sections.

4. Click the **Quantity label** in the Page Header section, press and hold **[Shift]**, click the **Quantity text box** in the Detail section, click the **=Sum([Quantity])** text box in the Category Footer section, release **[Shift]**, click **Format** on the menu bar, point to **Align**, then click **Right**
   The right edges of the Quantity label, Quantity text box, and Quantity calculated controls are aligned. With the edges at the same position and the information right-aligned within the controls, the controls form a perfect column on the final report.

5. Click the **blue line** below the labels between the Artist and and Quantity Fields in the Page Header section, press and hold **[Ctrl]**, press the **Down Arrow key [▼]** twice to move the line down two pixels, then release **[Ctrl]**
   You can also move and resize controls using the mouse, but precise movements are often easier to accomplish using quick keystrokes. Pressing the arrow keys while holding [Ctrl] moves the selected control one pixel (picture element) at a time in the direction of the arrow. Pressing the arrow keys while holding [Shift] resizes the selected control.

6. With the blue line still selected, press and hold **[Shift]**, then press the **Right Arrow key [➤]** as many times as necessary to extend the line to the right edge of the Quantity label
   The extended line better defines the sections on the page.

7. Click the **Save button** , click the **Print Preview button** , then scroll and zoom so that your report looks similar to Figure D-13

Click here to select all the controls in the Category Footer section

Formatting (Form/Report) toolbar

Align Right button

Four controls are right-aligned

Blue line is longer

Right edges of controls are aligned

Bottom edges of controls are aligned
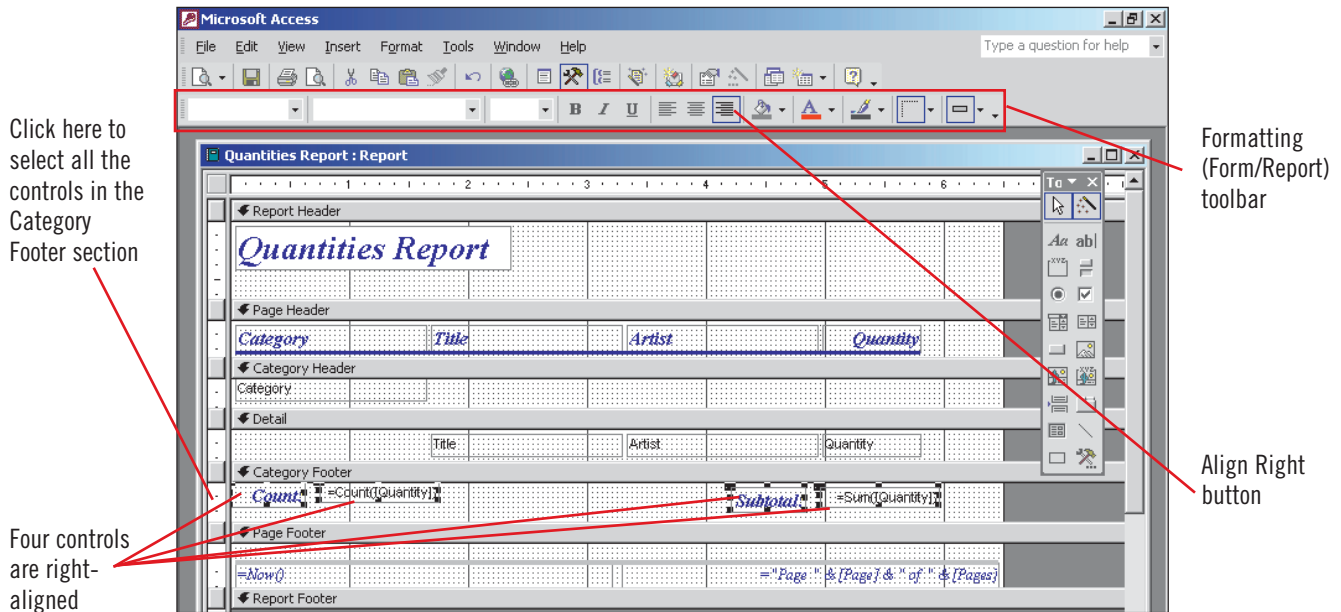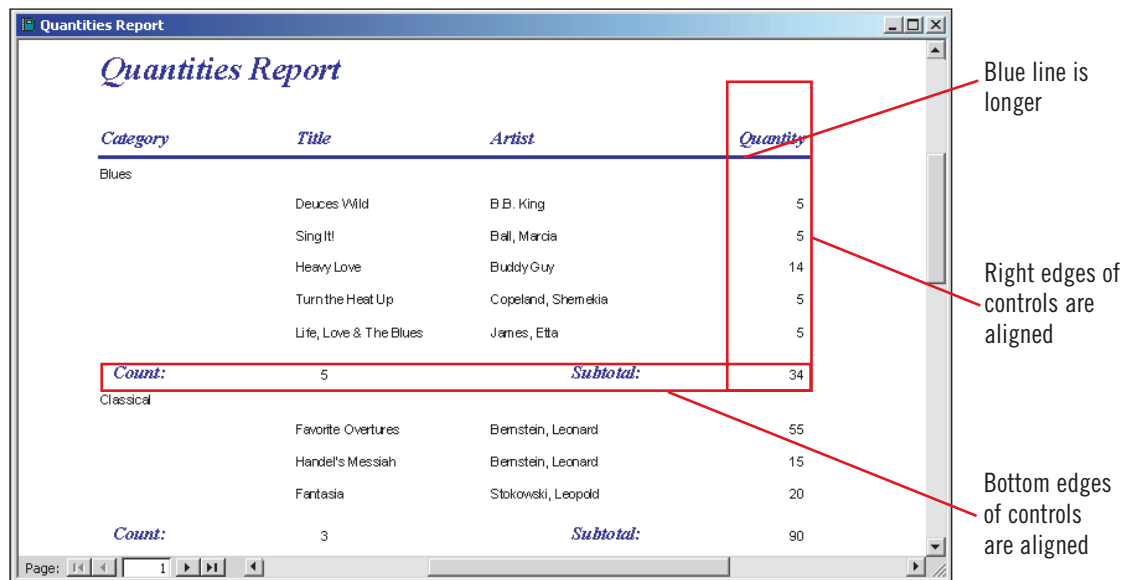
Formatting Controls

Formatting refers to enhancing the appearance of the information. Table D-3 lists several of the most popular formatting commands found on the Formatting (Form/Report) toolbar. Although the Report Wizard automatically applies many formatting embellishments to a report, you often want to improve upon the appearance of the report to fit your particular needs. 🖋 Kelsey doesn't feel that the music category information is prominent on the report, so she wants to format that control to change its appearance.

Steps

1. Click the **Design View button** 📐 on the Print Preview toolbar, then click the **Category text box** in the Category Header section
   Before you can format any control, it must be selected.

2. Click the **Font Size list arrow** [8 ▾] on the Formatting (Form/Report) toolbar, click **11**, then click the **Bold button** 𝐁 on the Formatting (Form/Report) toolbar
   Increasing the font size and applying bold are common ways to make information more visible on a report. You can also change the colors of the control.

3. With the Category text box still selected, click the **Font/Fore Color list arrow** 🅰▾, then click the **red box** (third row, first column on the left) as shown in Figure D-14
   Many buttons on the Formatting (Form/Report) toolbar include a list arrow that you can click to reveal a list of formatting choices. When you click the color list arrow, a palette of available colors is displayed.

4. With the Category text box still selected, click the **Fill/Back Color list arrow** 🎨▾, then click the **light gray box** (fourth row, last column on the right)
   Be careful about relying too heavily on color formatting. Background shades often become solid black boxes when printed on a black-and-white printer or fax machine. Fortunately, Access allows you to undo up to your 20 most recent actions in Report Design View.

5. With the Category text box still selected, click the **Undo button** ↩ on the Report Design toolbar to remove the background color, click ↩ to remove the font color, click **Edit** on the menu bar, then click **Redo Property Setting** to redo the font color
   If you undo more actions than desired, use the Redo command on the Edit menu to redo the last undone action. The Redo menu command changes depending on the last undone action, and it can be used to redo up to 20 undone actions.

6. Click the **Line/Border Color list arrow** 🖊▾, click the **blue box** (second row, sixth column), then click the **Print Preview button** 🔍
   The screen should look like Figure D-15.

7. Click **File** on the menu bar, click **Print**, type **1** in the From text box, type **1** in the To text box, click **OK**, then click the **Close button** [Close] on the Print Preview toolbar

8. Click the **Save button** 💾, then close the Quantities Report

FIGURE D-14: Working with color formats

Font size

Bold button

Fill/Back Color button

Font/Fore Color button

Category text box is selected

Line/Border Color button

Blue

Light gray
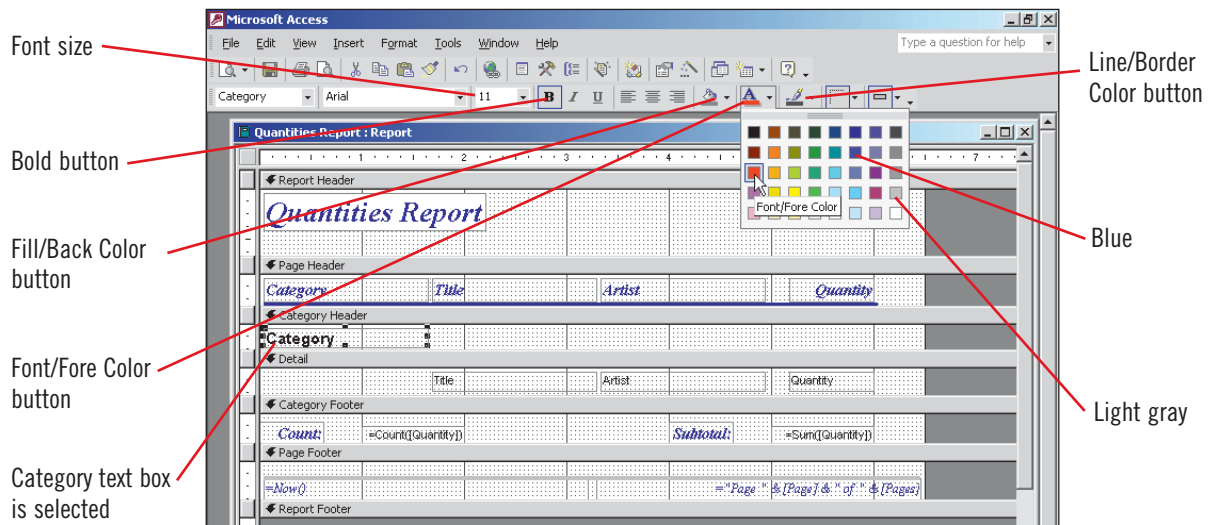
FIGURE D-15: Formatted Quantities Report

Category text box has been formatted
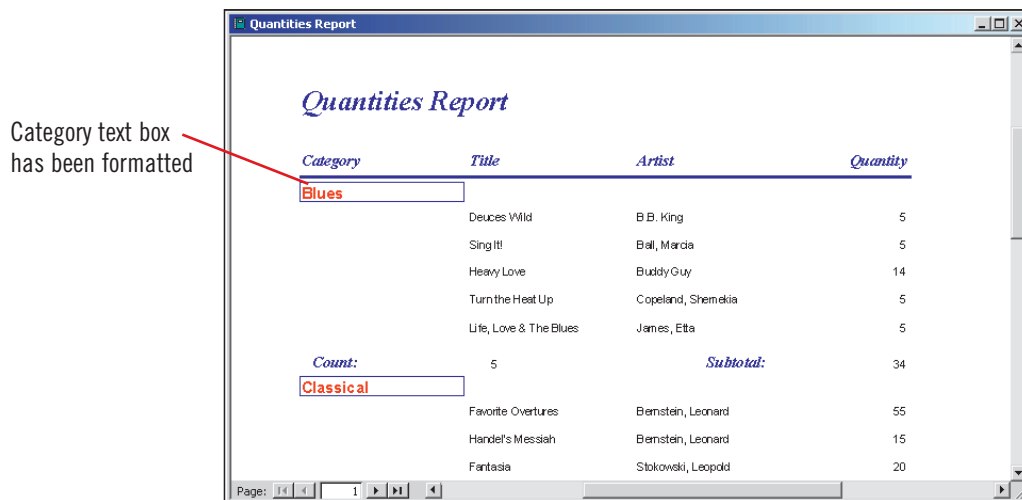
TABLE D-3: Useful formatting commands

button	button name	description
B	Bold	Toggles bold on or off for the selected control(s)
I	Italic	Toggles italics on or off for the selected control(s)
U	Underline	Toggles underline on or off for the selected control(s)
≡	Align Left	Left-aligns the selected control(s) within its own border
≡	Center	Center-aligns the selected control(s) within its own border
≡	Align Right	Right-aligns the selected control(s) within its own border
🎨	Fill/Back Color	Changes the background color of the selected control(s)
A	Font/Fore Color	Changes the text color of the selected control(s)
✎	Line/Border Color	Changes the border color of the selected control(s)
▢	Line/Border Width	Changes the style of the border of the selected control(s)
▭	Special Effect	Changes the special visual effect of the selected control(s)

Creating Mailing Labels

Mailing Labels are used for many business purposes such as identifying folders in a filing cabinet, labeling products for sale, or providing addresses for mass mailings. Once you enter data into your Access database, you can easily create mailing labels from this data using the **Label Wizard** that creates a report object. ✏️ Kelsey has been asked to create labels for the display cases in the MediaLoft stores with the Artist and Title fields only. The labels are to be printed in alphabetical order by Artist and then by Title. Kelsey uses the Label Wizard to get started.

Steps 1 2 3 4

1. Click **Reports** on the Objects bar in the MediaLoft-D database window (if not already selected), click the **New button** 🖼, click **Label Wizard** in the New Report dialog box, click the **Choose the table or query where the object's data comes from list arrow**, click **Music Inventory**, then click **OK**

   The Label Wizard dialog box opens as shown in Figure D-16. Avery is the default manufacturer, and produces a wide variety of labels measured in both millimeters and inches, but many other international label manufacturers can also be chosen. Avery 5160 labels are one of the most popular sizes in the United States, and are measured in inches.

2. Click the **English** option button (if not already selected), scroll and click **5160** in the Product number list, then click **Next**

   The next wizard dialog box allows you to change the font, font size, and other text attributes.

3. Click the **Font size list arrow**, click **11**, click the **Font name list arrow**, scroll and click **Comic Sans MS**, then click **Next**

   The next wizard dialog box asks you to set up the **prototype label**, a sample format upon which the final mailing labels will be created. Any text, spaces, or punctuation that you want on the prototype label must be entered from the keyboard.

4. Double-click **Artist**, press **[Enter]**, then double-click **Title**

   Your screen should look like Figure D-17.

5. Click **Next**, double-click **Artist** for the primary sort field, then double-click **Title** for the secondary sort field

   Artist is specified as the primary sort field and Title as the secondary sort field so that the labels will be printed in ascending order based on the value in the Artist field, with records from the same artist further sorted in ascending order by the value in the Title field.

6. Click **Next**, type **Artist-Title Labels** to name the report, click **Finish**, click **OK** if prompted about the size of the columns, then click the **Zoom pointer** 🔍 to see a full page of labels

   The labels should look like Figure D-18.

7. Click the **Close button** [Close] on the Print Preview toolbar, then click the **Save button** 💾

8. Click **File** on the menu bar, then click **Exit** to exit Access

Trouble?

If your fields are on the same line, you did not press [Enter] after each line. Select and delete the fields, then redo Step 4.

FIGURE D-16: Label Wizard

English or Metric
unit of measure

Avery is the default
label manufacturer
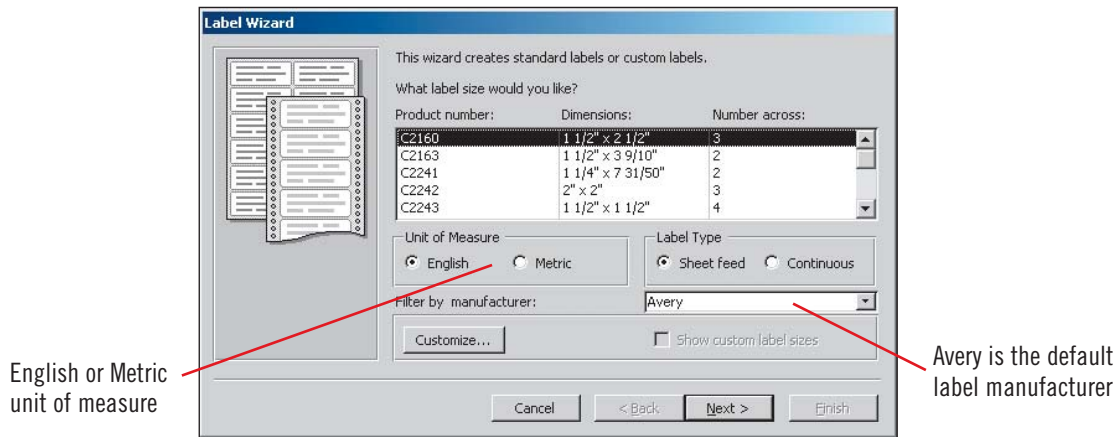
FIGURE D-17: The prototype label

Artist field

Title field
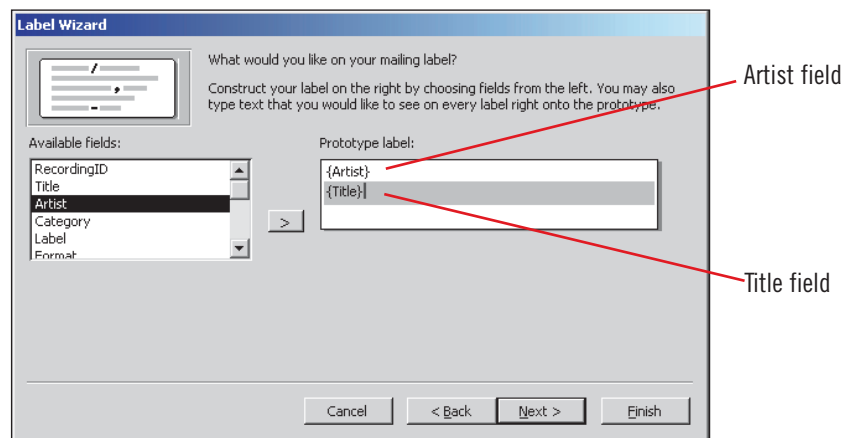
FIGURE D-18: The Artist-Title Labels report

Labels are 3 columns by
10 rows on each page
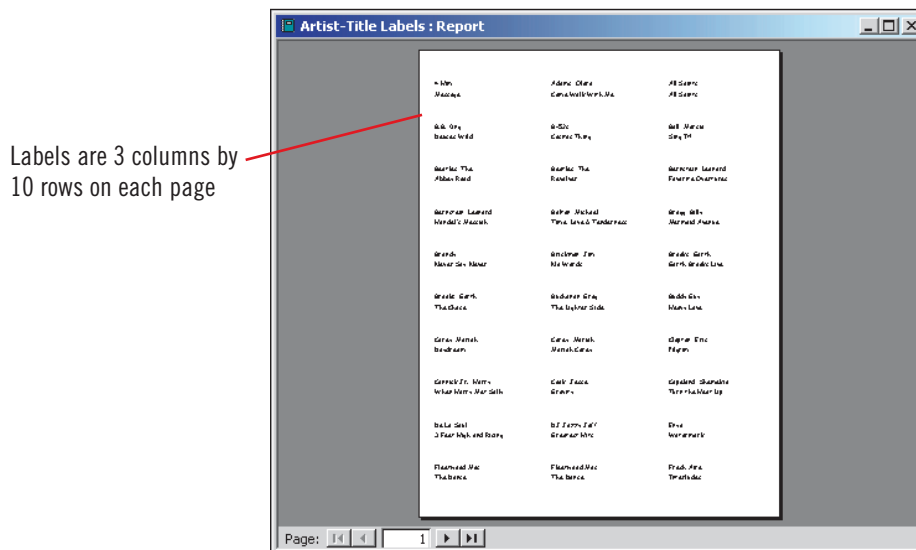
Practice

▶ Concepts Review

Label each element of the Report Design View window shown in Figure D-19.
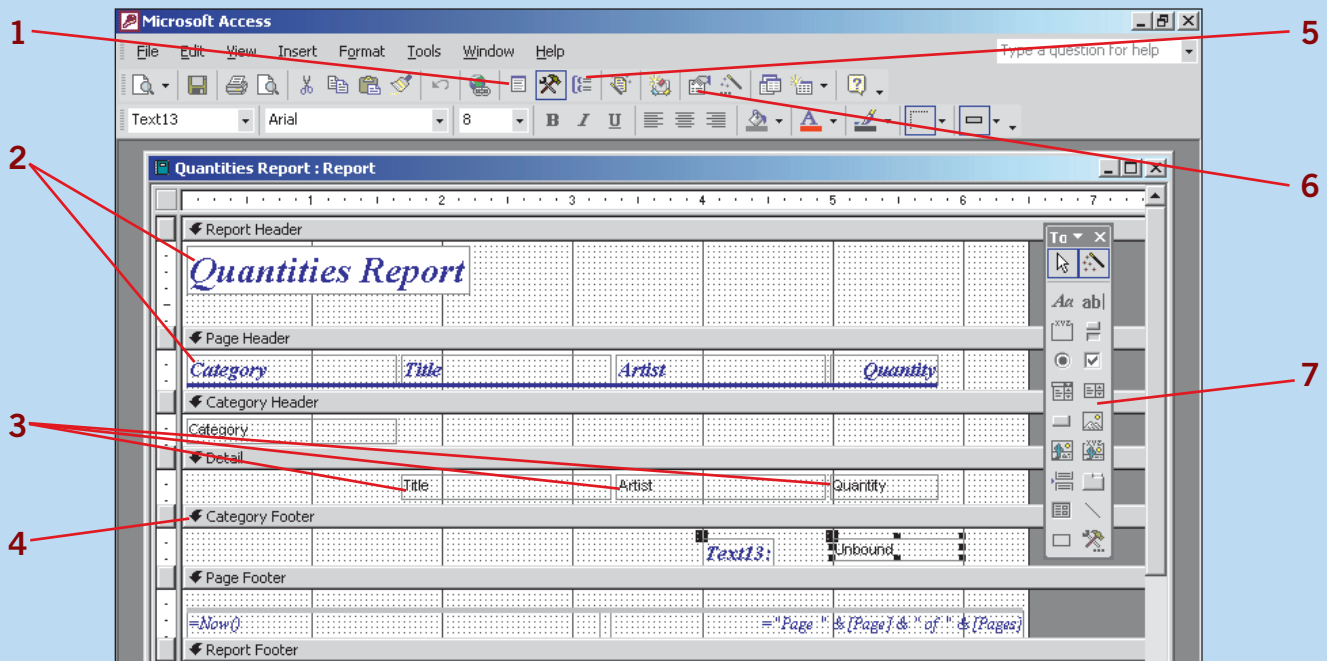
Match each term with the statement that describes it.

8. **Function**	**a.**	Determines where a control will display on the report
9. **Section**	**b.**	Sorting records *plus* providing a section before and after the group of records
10. **Detail section**	**c.**	Access object used to create paper printouts
11. **Report**	**d.**	Enhancing the appearance of the way information displays in the report
12. **Formatting**	**e.**	A built-in formula provided by Access that helps you quickly create a calculated expression
13. **Grouping**	**f.**	Prints once for every record

Select the best answer from the list of choices.

14. **Press and hold which key to select more than one control in Report Design View?**
    a. [Ctrl]
    b. [Alt]
    c. [Shift]
    d. [Tab]
15. **Which type of control is most commonly placed in the Detail section?**
    a. Label
    b. Text box
    c. Combo box
    d. List box
16. **Which type of control is most commonly placed in the Page Header section?**
    a. Label
    b. Combo box
    c. Command button
    d. Bound image
17. **A calculated expression is most often placed in which report section?**
    a. Report Header
    b. Detail
    c. Formulas
    d. Group Footer
18. **Which of the following would be the appropriate expression to count the number of records using the FirstName field?**
    a. =Count(FirstName)
    b. =Count[FirstName]
    c. =Count{FirstName}
    d. =Count([FirstName])
19. **To align the edges of several controls with respect to one another, you use the alignment commands on the:**
    a. Formatting toolbar.
    b. Standard toolbar.
    c. Print Preview toolbar.
    d. Format menu.
20. **To display the Clipboard task pane, you would choose the Office Clipboard from which menu?**
    a. Format
    b. Edit
    c. View
    d. Tools

▶ Skills Review

1. **Plan a report.**
   a. Plan a report to use for tracking job opportunities as if you were looking for a new job. To gather the raw data for your report, find a newspaper or Web site with job listings in your area of interest.
   b. Identify the Report Header, Group Header, and Detail sections of the report by using sample data based on the following information:
      • The title of the report should be **Job Opportunity Report**.
      • The records should be grouped by the Job Title field. For example, if you are interested in working with computers, job titles might be Database Specialist or Computer Analyst. Include at least two job title groupings in your sample report.
      • The Detail section should include information on the company, contact person, and telephone number for each job opportunity.

2. **Create a report.**
   a. Start Access and open the **Club-D** database from the drive and folder where your Project Files are located.
   b. Use the Report Wizard to create a report based on the CONTACTS table.
   c. Include the following fields in the following order for the report: STATUS, FNAME, LNAME, DUESOWED, DUESPAID
   d. Do not add any grouping or sorting fields.
   e. Use the Tabular layout and Portrait orientation.
   f. Use a Bold style and title the report **Contact Status Report**.
   g. Preview the first page of the new report.

3. **Group records.**
   a. In Report Design View, open the Sorting and Grouping dialog box, and group the report by the STATUS field in ascending order. Open both the Group Header and Group Footer sections for the STATUS field, then close the Sorting and Grouping dialog box.
   b. Move the STATUS text box in the Detail section up to the left edge of the STATUS Header section.
   c. Preview the first page of the new report.

4. **Change the sort order.**
   a. In Report Design View, open the Sorting and Grouping dialog box, then add LNAME as a sort field in ascending order immediately below the STATUS field.
   b. Close the Sorting and Grouping dialog box, then preview the first page of the new report.

5. **Add a calculation.**
   a. In Report Design View, add a text box control in the STATUS Footer section directly below the DUESOWED text box that is in the Detail section.
   b. Delete the accompanying label to the left of the unbound text box.
   c. Add another text box control in the STATUS Footer section directly below the DUESPAID text box in the Detail section.
   d. Delete the accompanying label to the left of the new unbound text box.
   e. Modify the unbound text boxes added to the STATUS Footer section so that they subtotal the DUESOWED and DUESPAID fields, respectively. The calculated expressions will be **=Sum([DUESOWED])** and **=Sum([DUESPAID])**.
   f. Add your name as a label to the Report Header section.
   g. Preview both pages of the report, then print both pages of the report.

6. **Align controls.**
   a. In Report Design View, right-align the new calculated controls in the STATUS Footer section.
   b. Select the DUESOWED text box in the Detail section, and the =Sum([DUESOWED]) calculated expression in the STATUS Footer section, then right-align the controls with respect to one another.

c. Select the DUESPAID text box in the Detail section, and the =Sum([DUESPAID]) calculated expression in the STATUS Footer section, then right-align the controls with respect to one another.

d. Select the two calculated controls in the STATUS Footer section, then align the bottoms of the controls with respect to one another.

7. Format controls.

a. Select the two calculated controls in the STATUS Footer section, click the Properties button, then change the Format property on the Format tab to Currency. Close the property sheet.

b. Select the STATUS text box in the STATUS Header section, change the font size to 12 points, bold and italicize the control, then change the Fill/Back color to bright yellow. The Report Design View should look like Figure D-20.

FIGURE D-20
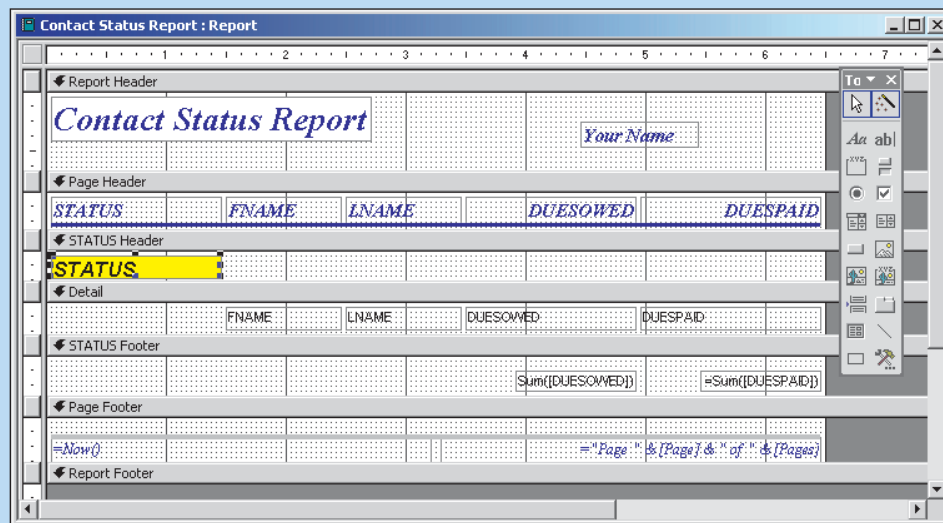
c. Save, preview, print, then close the report.

8. Create mailing labels.

a. Use the Label Wizard and the CONTACTS table to create mailing labels using Avery metric labels.

b. The text should be formatted with an Arial 10 point font, Light (font weight), black (text color), with the product number L7668, and with no italic or underline attributes.

c. Organize the prototype label as follows:

FNAME LNAME
COMPANY
STREET
CITY, STATE ZIP

You have to enter spaces between the FNAME and LNAME fields as well as between the CITY, STATE, and ZIP fields. Also, you have to type a comma after the CITY field.

d. Sort the labels by the ZIP field.

e. Save and name the report **Mailing Labels**, then view the report.

f. Close the Club-D database then exit Access.

▶ Independent Challenge 1

You have been hired to create a report for a physical therapy clinic.

   a. Start Access then open the **Therapy-D** database from the drive and folder where your Project Files are located.

   b. Use the Report Wizard to create a report using all of the fields from the Location Financial Query.

   c. View your data by Survey, group by Street, sort by PatientLast, click the Summary Options button, then sum both the AmountSent and AmountRecorded fields.

   d. Use the Stepped layout, Portrait orientation, and Soft Gray style.

   e. Name the report **Location Financial Report**.

   f. Modify the AmountSent and AmountRecorded labels in the Page Header section to **Sent** and **Recorded**, respectively.

   g. Change the font/fore color of the labels in the Page Header section to bright blue.

   h. Widen the Street text box in the Street Header section to twice its current size, and change the border color to bright blue.

   i. Add your name as a label to the Report Header section.

   j. Save, then print the report.

   k. Close the Therapy-D database then exit Access.

▶ Independent Challenge 2

You have been hired to create a report for a physical therapy clinic.

   a. Start Access and open the **Therapy-D** database from the drive and folder where your Project Files are located.

   b. Use the Report Wizard to create a report using all of the fields from the Therapist Satisfaction Query except for the Initials and First fields.

   c. View the data by Survey. Do not add any grouping levels and do not add any sorting levels.

   d. Use the Tabular layout, Portrait orientation, and Casual style.

   e. Title the report **Therapist Satisfaction Report**, then view the report.

   f. In Report Design View, add your name as a label in the Report Header section, then print the report.

   g. Group the report by Last, and open both the Group Header and Group Footer sections for the Last field.

   h. Use the Sorting and Grouping dialog box to further sort the records by PatientLast. Close the Sorting and Grouping dialog box.

   i. Move the Last text box from the Detail section up into the Last Header section.

   j. Remove bold from all of the labels in the Page Header section, then widen the title label in the Report Header section to make sure all of the text appears when previewed.

   k. Using the Text Box button on the Toolbar, add two text boxes in the Last Footer section. Place them directly below the Courtesy and Knowledge text boxes that are in the Detail section. Delete the labels that accompany the new text boxes.

   l. Insert an expression into the new unbound text boxes to create the calculated controls **=Avg([Courtesy])** and **=Avg([Knowledge])**, respectively.

  m. Resize the new calculated controls so that they are the same size as the Courtesy and Knowledge text boxes in the Detail section.

   n. Use the property sheet for the two new calculated controls to change the Format property on the Format tab to Fixed.

   o. Right-align the two new calculated controls within their own borders. Also, align the right edge of the =Avg([Courtesy]) and the Courtesy text boxes with respect to each other. Right-align the edges of the =Avg([Knowledge]) and Knowledge text boxes with respect to each other.

   p. Align the top edges of the new calculated controls with respect to each other.

q. If the report is wider than 6.5" wide, drag the right edge of the report to the left so that the final report is no wider than 6.5".

r. Save, then preview the report. The report should look like Figure D-21.

s. Print the report, close the Therapy-D database, then exit Access.

FIGURE D-21

▶ Independent Challenge 3

Use the knowledge and skills that you have acquired about Access to create an attractive report that includes information about colleges and universities that offer programs in computer science. Create a database containing this information, and then design a report that displays the data. Gather information from libraries, friends, and the Web to enter into the database.

a. Start Access then create a new database called **Colleges** in the drive and folder where your Project Files are located. Include any fields you feel are important, but make sure you include the institution's name, state, and whether it is a four- or two-year school.

b. Find information on schools that offer programs in computer science. If you are using the Web, use any available search engines.

c. Compile a list of at least five institutions, and enter the five records into a table named **Computer Science Schools**.

d. Create a report that includes all the fields in the table **Computer Science Schools**, and group by the field that contains the information on whether the college is a four- or two-year school.

e. Sort the records by the state, then by the institution's name.

f. Use an appropriate style and title for your report. Insert your initials at the end of the report title.

g. Save, preview, then print the report.

h. Close the Colleges database, then exit Access.

Independent Challenge 4

You are on the staff of an economic development team whose goal is to encourage tourism in the Baltic Sea region. You have created an Access database called Baltic-D to track important fields of information for the countries in that region. You have been using the Internet to find information about events and demographics in the area and entering that information into the database using existing forms. You need to create and then print reports to present to the team.

a. Start Access and open the **Baltic-D** database from the drive and folder where your Project Files are located.

b. Connect to the Internet, then go to www.google.com, www.lycos.com, or another search engine to conduct research for your database. Your goal is to find three upcoming events for Helsinki, Finland, and to print the Web pages.

c. Open the Cities form, find the Helsinki record, and enter three events for Helsinki into the Events fields. EventID is an AutoNumber field, so it will automatically increment as you enter the EventName and EventDate information.

d. Use the Report Wizard to create a report based on the Baltic Area Festivals query. Use all of the fields. View the data by Cities, do not add any more grouping levels, and sort the records in ascending order by EventDate.

e. Use a Stepped layout, a Portrait orientation, and a Corporate style.

f. Title the report **Baltic Area Events**.

g. Switch to Report Design View to apply additional formatting embellishments as desired.

h. Add your name as a label to the Report Header section.

i. Save, print, then close the report. Exit Access.

► Visual Workshop

Open the **Club-D** database from the drive and folder where your Project Files are located to create the report based on the CONTACTS table. The report is shown in Figure D-22. The Report Wizard, Stepped Layout, and the Corporate style were used to create this report. Note that the records are grouped by the CITY field and sorted within each group by the LNAME field. A calculated control that counts the number of records is displayed in the City Footer. Add a label with your name to the Report Header section, then save and print the report.

FIGURE D-22

CITY	LNAME	FNAME	PHONE
Belton			
	Duman	Mary Jane	555-8844
	Hubert	Holly	555-6004
	Mayberry	Mitch	555-0401
Count: 3			
Kansas City			
	Alman	Jill	555-6931
	Bouchart	Bob	555-3081
	Collins	Christine	555-3602
	Diverman	Barbara	555-0401

Membership by City — *Your Name*